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Innovative change in the Army

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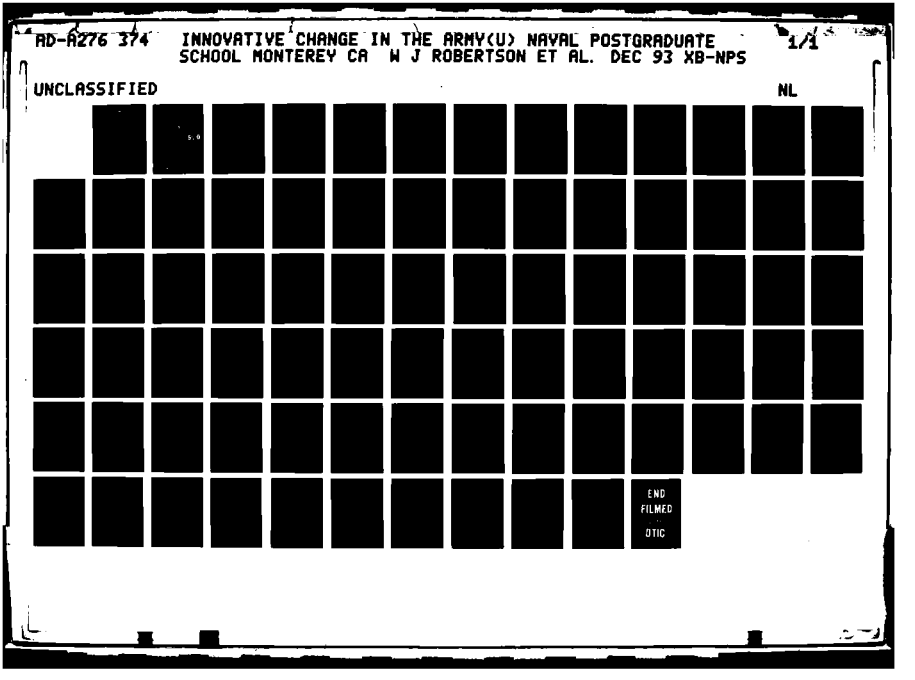
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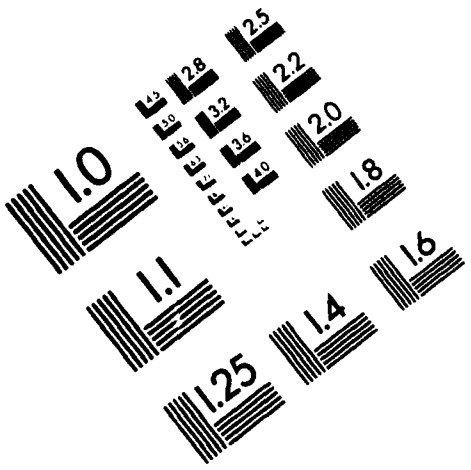

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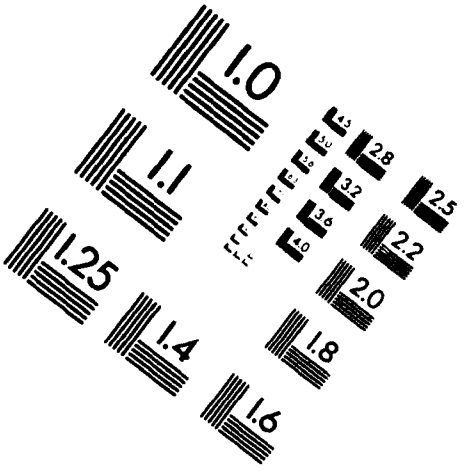

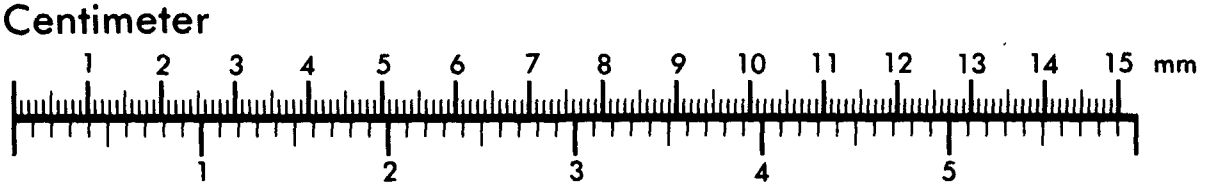

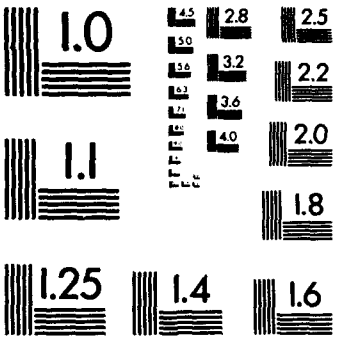

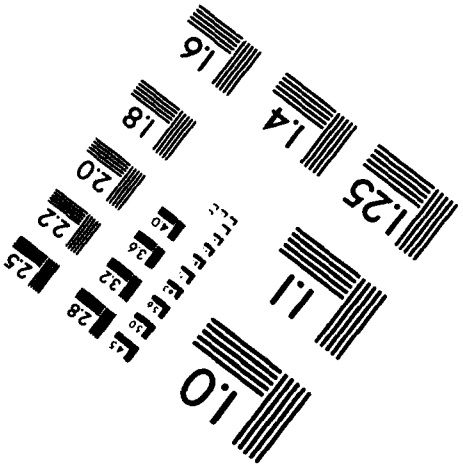

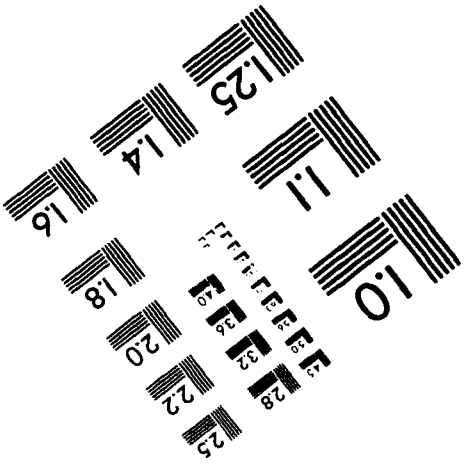

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NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

INNOVATIVE CHANGE IN THE ARMY

by

Wallace J. Robertson
and
Robert A. Swenson

December, 1993

Thesis Advisor: Nancy Roberts
Co-Advisor: Frank Varnado

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Prior to and during Operation Desert Shield, the Division adopted the LAB/FOB support concept that contributed significantly to the Division's success in Operation Desert Storm. The analysis of this case shows how innovative change is brought about in an Army organization.

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Innovative Change in the Army

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ABSTRACT

With the collapse of the Soviet threat, the Army is finding itself in a period of significant change: changes in funding, size, focus and missions. To adapt to this change, the Army needs to be more innovative. This thesis examines the subject of innovative change. It analyzes a case of successful innovative change in the 101st Airborne Division's support structure.

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I. INTRODUCTION

A. BACKGROUND

With the collapse of the Soviet Union, the United States Army is facing a period of almost unprecedented change. The Army must change its focus from a war in Europe to responding to unforeseen regional crises throughout the world. The Army is also being given many new missions (peacekeeping, disaster relief, humanitarian, drug interdicting, etc.), missions for which it has very little experience, training or doctrine. The Army is also experiencing significant reductions in size and funding, so it will have to adapt to this new world order, and its role in it, with less resources than it has had in the past. In order to cope with these changes, the Army must be innovative, finding new and better ways to do its traditional mission as well as finding the best way to deal with its new missions.

The Director of Net Assessment for the Office of the Secretary of Defense, A. W. Marshall, believes that we are experiencing the early stage of major change in the nature of warfare. He claims that we are on the verge of a military revolution (Marshall, 1993). He compares this to the military-technical revolution that occurred in the 1920s and '30s. Then the development of technologies like the airplane,

the aircraft carrier, and the tank revolutionized warfare. These technologies led to changes in concepts of operations, in military organizations, and in the character of warfare itself. He believes that this emerging military revolution will not be the result of technology but the result of innovation, finding new, better, innovative ways to use existing technology to change the nature of warfare. He warns that if the next couple of decades are to be a period of innovation, it will require top-level support to more junior innovators and innovations.

To be prepared for this emerging military revolution and to cope with the changes currently at hand, Army leadership will have to understand innovative change, the factors affecting it, and how it is brought about in an Army organization.

B. OBJECTIVES

The objective of this thesis is to provide the reader with an understanding of how innovative change can be brought about in an Army organization. We will explore the factors affecting innovative change and the methods to be used to bring it about. We will also present a case of successful innovative change in an Army organization. It is our intent that this understanding of innovative change will assist the reader in bringing it about or support others who attempt it elsewhere in the Army.

C. RESEARCH QUESTIONS

1. Primary

- How is innovative change brought about in a conservative, traditional organization like the United States Army?

2. Secondary

- What is innovation? Who is the innovator or entrepreneur?
- What are the basic elements required to bring about change?
- How is resistance to change overcome?

D. SCOPE AND LIMITATIONS

This thesis is not an exhaustive analysis of change. It focuses on one particular case of change. The analysis concentrates on concepts pertinent to the case study and not on all concepts valuable to understanding and managing change.

The case study is an historical account of what occurred in the 101st Airborne Division prior to and during Operations Desert Shield and Desert Storm. It is limited to the extent that we were unable to contact all principals. Only four of the seven principals involved could be located and agreed to interviews.

In order to maintain a focus on the aspects of successful innovative change, this paper is 'de-personalized' except for the entrepreneur. The focus is on the change itself, for good or bad, and how this particular entrepreneur successfully developed and implemented change in his organization. Exactly

who supported the entrepreneur and whether or not the change was absolutely essential for the organization are less significant to the theme of this thesis. The objective of our analysis is to provide the reader with an extensive understanding of the aspects of innovative change and to equip him or her with the tools necessary to develop and implement innovative ideas in a military environment.

E. LITERATURE REVIEW AND METHODOLOGY

Several references were reviewed to help us understand the change process. Of these references, we selected aspects that best analyze innovative change in organizations such as the 101st Airborne Division, which is the organization undergoing change in our case study.

We conducted several interviews with principals involved in the combat service support doctrinal change in the 101st Airborne Division. Generally, each principal was given the same interview questions. Interviews were conducted by recorded telephone conversations, which were later transcribed, or by questionnaire.

We conducted research on the historical events of the Division's activities in Operations Desert Shield and Desert Storm. This information came from "Lessons Learned" documents of the Division and the XVIIIth Airborne Corps and from articles published in professional publications such as The Military Review. We also reviewed the development of the

LAB/FOB concept in the Division's historical documents (standard operating procedures, battle notes, doctrinal publications).

F. DEFINITIONS AND ABBREVIATIONS

The following acronyms and definitions are provided to assist the reader.

- **DISCOM**: Division Support Command. This is a brigade sized unit responsible for the combat service support operations in the division. Elements of the command are task organized to support the three infantry brigades in the event of a deployment.
- **DSA**: Division Support Area. This area is located in the division rear area and is composed of the main support companies of the DISCOM which are responsible for direct support to the division.
- **BSA**: Brigade Support Area. This area is located in the brigade area of operations and is composed of the forward combat service support companies of the DISCOM which are responsible for direct support to the brigade task force.
- **LAB**: Logistic Assault Base. This is a scaled down version of the BSA. Its size depends on the mission of the brigade. Generally, where the BSAs were composed of the same structure of personnel and equipment, LABs were tailored packages that were very mobile.
- **FOB**: Forward Operating Base. This is an ad hoc organization composed of elements of the forward support companies not required in the LABs and of selected personnel and equipment from the DSA. The FOB was strategically located between the DSA and the LABs in order to provide immediate resupply of high demand items to the LABs and to be an intermediate distribution point for the division based on the availability of road networks and airfields. The size and composition of the FOB was tailored to the mission of the division and the number of units it supported.

G. ORGANIZATION OF STUDY

We will initially provide a review of literature that pertains to change. Next, we will provide a case study concerning change in the service support operations for the 101st Airborne Division (Air Assault) that occurred just prior to Operations Desert Shield and Desert Storm. This case study is a particularly interesting subject for innovative change in an organization. It involves an entrepreneur who possesses the ingenuity, boldness, and resolve to attempt restructuring long standing logistic operations in an organization with many strong adversaries to change. This chapter will be followed by an analysis of the case study. Finally, we will finish with a conclusion which provides a brief overview of the thesis.

II. LITERATURE REVIEW

A. INNOVATIVE ORGANIZATIONAL CHANGE

Our thesis is about change. Since there are many different types of change, it is important that we first briefly discuss the different types of change to narrow our focus.

Of the many types (natural, societal, political, personal, and organizational), our case addresses organizational change. An organization is defined as:

> the rational coordination of the activities of a number of people for the achievement of some common explicit purpose or goal, through division of labor and function, and through a hierarchy of authority and responsibility (Nadler and Tushman, 1991, p. 544).

The organization is the 101st Airborne Division and the question was how to change its combat service support structure and operations.

Change within an organization may be regressive, going back to the old way of doing business, or progressive, finding new, better innovative ways of conducting operations. Change can also be the result of decay. A system that fails to actively manage its change may indeed change, but that change will result in decay and obsolescence. It is innovative change with which this thesis is concerned. Innovation is defined as the process of bringing any new idea into use. New

ideas can be a product or service. They include ideas for reorganizing, cutting costs, putting in a new budgeting system, improving communications or assembling products in teams. Innovation is the generation, acceptance and implementation of new ideas or processes (Kanter, 1983, p. 20).

Innovative change can be first order or second order change. First order innovative change is innovation that occurs within a system while the system itself remains essentially the same. Second order innovative change is a change in the system itself (Watzlawick and others, 1974, p. 10). First order change is characterized as normal, incremental and evolutionary, while second order change is characterized as radical, transformational, and revolutionary (Levy, 1986, p. 10). This can be best explained with an example. During its first one hundred years, the telephone system in the United States went through many changes, but the system itself remained essentially the same. All telephone service was provided by one company, the Bell Telephone Company. In essence, Bell Telephone was the system. All the changes that occurred (growth, technological, improved service and decreased reliance on operators) were all first order changes. The system remained essentially the same with Bell as the sole provider of telephone service. The breakup of Bell Telephone in the late 1970s was a second order change. The system itself changed. There are now many regional

telephone systems and several corporations competing to provide long distance telephone service.

Second order change is considered a higher level change. It requires the system be viewed and introduced from a higher level. The current telephone system could not have been introduced from within the Bell Telephone System.

Innovative organizational change is usually led by the organizational entrepreneur (sometimes referred to as the intrapreneur because he operates from within the organization) (Stoner and Freemen, 1989, p. 713). To understand how innovative change is brought about, we must understand the entrepreneur, the entrepreneur's attitudes, beliefs, and perceptions of the environment. How does the entrepreneur overcome significant resistance to his innovation and how does he obtain and use power to bring about change?

1. The Entrepreneur/Innovator

According to J.B. Say, the French economist who coined the term around 1800, "the entrepreneur shifts economic resources out of low areas and into areas of higher productivity and greater yield." In other words, the entrepreneur finds new ways to use resources to maximize productivity and effectiveness (Osborne and Gaebler, 1992, p. XIX). Although this definition covers what an entrepreneur does, it does not explain who he is, his character, or how he does it.

Entrepreneurs are, above all, visionaries (Kanter, 1983, p. 239), - those people who are able to perceive opportunities that others do not (Stoner and Freeman, 1989, p. 697), or see opportunities where others see only problems (Stoner and Freeman, 1989, p. 697). Entrepreneurs see change as the norm and as healthy. They always search for change, respond to it and exploit it as an opportunity (Stoner and Freeman, p. 698). Entrepreneurs possess tremendous focus and are able to remain steadfast in their vision, even when the interests of others wane. Tom Peters states that they possess energy, passion, idealism, pragmatism, cunning, towering impatience and an unrealistic unwillingness to allow any barrier to set them back (Peters, 1987, p. 301).

Entrepreneurs possess a tolerance for ambiguity (Stoner and Freeman, p. 709). They tend to have a longer time horizon than their counterparts. They show conviction for an idea and have no need for immediate results (Kanter, 1983, p. 239). Because of this, they are less affected by the stress induced by time pressures that influence much decision making.

The literature reveals some disagreement on another characteristic of the entrepreneur. Some feel entrepreneurs are risk takers, that they possess a "bold heart of risk" (Marris, 1974, p. 119) and that organizations should select or train risk takers (Kanter, 1983, p. 239). Others believe that entrepreneurs like to take risks but only reasonable ones (Stoner and Freeman, 1989, p. 706). Still others stated that

entrepreneurs have "one thing and only one thing in common, they are not risk takers (Osborne and Gaebler, 1992, p. XX). We hope in our analysis to offer a possible explanation for these differing viewpoints.

Entrepreneurs are also described as having "Type A" behaviors, a "chronic, incessant struggle to achieve more and more in less and less time, and if required, to do so against the opposing efforts of other things or persons." They have a need to achieve and feel that they have control over their own lives and are not controlled by fate, luck or other external forces (Stoner and Freeman, 1989, pp. 708-709).

We have reviewed the characteristics of an entrepreneur. However, these characteristics alone do not make someone an entrepreneur. What makes one an entrepreneur is having an innovative idea and seeing it through the entrepreneurial process to successful implementation.

The entrepreneurial process has three phases: creation, design and implementation (Roberts, 1992, p. 58). In the creation phase, the entrepreneur generates a new innovative idea. This new idea may be totally original or it may be borrowed or adapted from existing ideas that are only new in the context in which they are applied.

In the design phase, the idea is transformed into something more tangible. The idea is put on paper and a plan is developed to translate the idea into an implementable "prototype".

The implementation phase starts with testing of the idea as designed. Can it work? Does it need to be modified? Can it get the needed support to succeed? Will it solve the problem it was designed to solve, and will it be worth the cost?

To be successful, the entrepreneur must act in many different roles as he goes through the entrepreneurial process. First, in the idea phase, he must be an intellectual, able to envision a new reality, to see beyond the problem to a better way of doing things. Next he must be an advocate who takes the basic idea through the design phase and turns it into a tangible proposal. He needs to be the idea champion who takes the proposal and gathers the support, sets the frame and uses the power tools necessary to get the proposal implemented and ensure its success. Last he must be an administrator with the necessary leadership and organizational skills needed to execute the approved proposal (Roberts, 1992, pp. 60-62). One must be successful in each role and must work the idea through each phase before he is considered an entrepreneur.

2. Resistance

The most important factor in understanding how change can be brought about is understanding resistance to change. Why are humans so often resistant to change? We think Peter Marris said it best when he said:

> We accept resistance to change as a fact of life. We expect civil servants to be defensive when challenged by innovators or peasant farmers to react with suspicion to new techniques. We know that children are easily upset by disturbances in the routine of life, and take it for granted that to lose someone you love is deeply distressing. But why? Humans are also the most adaptable of all living creatures - they survive in an extreme variety of social and physical environments. They go through great changes in the course of the most commonplace careers. We scarcely ever live two days exactly alike. In the face of drastic disruption - wars, earthquake, enslavement - the survivors somehow pull themselves together and go on. Why then should we think conservatism natural, and what is its nature? (Marris, 1974, p. 5)

Each of us has our own perception of reality, "a meaningful pattern of relationships," (Marris, 1974, p. 1) a set of assumptions, understanding and experiences that we use to give meaning to the world around us. We use this perception to bring predictability and continuity to our lives. It is perhaps easiest to illustrate this with an example. Consider your next day at work. Even though you have not experienced it yet, you know basically what time you will arrive, what you will do, with whom you will interact and how that interaction will be characterized - friendly, formal or adversarial. We base this perception of our next day at work on our past experiences and on a belief that the world is predictable and events have continuity. We can expand this to every aspect of our lives.

We have a basic perception, that pattern of relationships with which we give meaning to everything in our environment. This perception is very important to us. It is

the basis for all our actions and interactions. It enables us to "predict our own behavior and the behavior of others" (Marris, 1974, p. 10). Without this perception, these basic assumptions of the world would be a series of random, discontinuous events without meaning in which we could not survive. Because our basic assumptions are so important to our survival, to our ability to cope with our environment, we tend to defend it vehemently, even ignoring facts that are incompatible with our scheme of things (Marris, 1974, pp. 8-9).

If these assumptions are so important and we defend them so vehemently, how then is it possible for us to adapt, to make sense of new experiences? We do so by assimilating the new experiences into our perception, we relate the new experiences to what we already know, we "make the unfamiliar familiar, to reduce the new to the old" (Marris, 1974, p. 9). We create a metaphor from what we know to explain what is new and unfamiliar (Pondy and others, 1988, p. 17).

We adapt and change incrementally over time, each increment within the limits of what can be assimilated into our basic assumptions. This, however, does not always work. Some new experiences cannot always be assimilated, contradicting facts cannot be ignored or explained away. When these experiences occur, they cause us to doubt or lose faith in our basic assumptions and create in us a feeling of ambivalence. Examples of experiences in the business world

that could cause this feeling are loss of profits or market share, rising costs or a new technology. These may cause a company to lose faith in its basic assumptions about how it does its business, its product marketing, method of production or its overall strategy. This feeling of ambivalence makes us first try to restore our lost faith in our basic assumptions, and when that proves impossible, then and only then are we receptive to innovative change. Through the innovation we hope to forge a new set of basic assumptions that enable us to restore the continuity and predictability of the world around us.

This ambivalence is similar to the experience of bereavement that occurs with the death of a loved one. Those intimately involved with death are faced with a radical disruption of their pattern of relationships (Marris, 1974, pp. 23-24). They first try to regain their pattern of relationships by continuing as if the death had not occurred. Once they realize that this is not possible and they have come to terms with the death, they then seek to develop a new pattern of relationships so they can go on with their lives.

The reason this is so important in order to understand innovative change is because unless the group on which the innovation is dependent has reason to doubt their basic assumptions, the innovation is doomed to failure. Consider the issue of gays in the military. The basic assumption within the military is that homosexual behavior is contrary to

the good morale and discipline of the military and therefore, cannot be tolerated. Although President Clinton clearly had the authority to impose change upon the military, by directing that gays be allowed in the military, he was unable to make the change. He was unable to make the change because the military had no reason to doubt its basic assumption. He was forced to accept a compromise that fit the military's basic assumption, gays can serve but homosexual behavior is still considered contrary to the good morale and discipline of the military, and engaging in it will result in discharge. It is not our intention here to over-simplify a very complicated issue, nor is it our intention to justify or explain the military's assumption on gays. Our intention is only to illustrate that the strength of the military's assumptions is one explanation for their resistance.

This process of rejecting old assumptions and accepting new ones affects people differently. Although most will need time to register shock, denial, grief and mourning (Pondy and others, 1988, p. 197), the period in which this happens will differ. The innovators or entrepreneurs (as in our case) may have already rejected the old assumptions and be convinced that their innovation is the way to establish a new, secure set of assumptions, while others are just starting to doubt their old assumptions. Some innovators consider the opposition to their innovation as ignorance or prejudice. The innovator has already worked out an integration of new

assumptions, perhaps through months or even years of analysis but they deny others the chance to do the same (Marris, 1974, p. 155). By doing so they are likely to entrench the opposition and doom their innovation to failure.

To be successful, innovators must be aware of this conflict between old and new that occurs in everyone, and that no one can resolve this conflict for another anymore than friends can tell the bereaved how to make the "best of it." There are however, ways to assist others through this process. First is through open communication. The innovator should explain to others exactly how he came to the realizations he has and how he worked out the conflicts for himself. He can present arguments that cause others to begin to doubt their assumptions. He should also allow others to openly express their opposition and reservations so he can help them along. Second the innovator should, if possible, get everyone effected involved early. As Tom Peters said, "involve everyone in everything" (Peters, 1987, p. 343). This way everyone will go through the process together and hopefully make the same realizations at the same time.

Without some doubt in basic assumptions and the ambivalence that comes with it, people will resist all attempts at change. However, we have all been involved in situations or know people who were involved in situations where everyone knew (and clearly expressed) that the way things were being done were not the best way to be done. Yet

often in these situations, people are still resistant to change. There are many stories in the Army of soldiers living in miserable conditions resisting movement to new locations.

This resistance comes from fear and insecurity -- the fear and insecurity that come from change. Our current situation may not be good, but it is familiar, and we know where we fit in - "My foxhole may be cold, wet and close to enemy fire but it's mine!" With change, the situation may get better, or it may get worse. Where will we fit in once in the new situation. The new foxhole may be colder, wetter and closer. People fear that change will jeopardize their job security, that they may not be needed after the change, or that they may not possess the skills required to carry out new tasks (Tichy, 1983, p. 344).

Fear also prevents people from attempting innovation. Every organization has people with innovative ideas, but often they fail to act because of the risk involved. What will happen if their idea should fail? Will it threaten their current position and employment or their future with the organization? This is certainly true in the Army. We all know of many instances where people had great ideas but when asked to give their idea a try, they are unwilling to do so because of the risk. The Army's performance evaluation system fosters this fear of risk. Performance evaluations are based on the achievement of stated objectives with no consideration of risks taken or effort applied. This leads to an

incremental approach to problem solving, concentrating on short term attainable objectives which will not be difficult to achieve or pose any risk to either the worker or the manager (Richards and Cloutier, 1993, pp. 19-23). Dr. Deming states that this type of performance evaluation based on objectives is management by fear, and it encourages short term performance at the expense of long term planning. It discourages risk taking, builds fear and undermines teamwork. He adds that these evaluations leave people "bitter, despondent, dejected, some even depressed and all unfit for work for weeks after the receipt of the rating" (Walton, 1986, p. 91).

In order to overcome the resistance resulting from fear, we must eliminate fear from the organization. One of Dr. Deming's fourteen points of management is "drive out fear." He states that "it is unbelievable what happens when you let loose fear" (Walton, 1986, p. 73). To do this, security must be provided for members of the organization. People must know that regardless of changes and the success or failure of innovations, their position and future in the organization is secure (Peters, 1987, p. 416). President Clinton recently said that one thing he learned in his first six months as President was that "to get people to really change you have to create conditions in which they feel secure" (TIME, 27 Sept. 93, p. 57). Change must become the norm within the organization, part of the member's basic

assumptions. Members should be evaluated not on meeting objectives but on their love of change (Peters, 1987, pp. 560-561). People must be rewarded for the level of risk they are willing to take, not for playing it safe.

The innovator can only reduce fear in people over whom he has control (his subordinates). There is very little he can do to reduce the fear in his boss and in the many external stakeholders who will influence the success or failure of his innovation. There may be influential individuals who do not share the same basic assumptions, those who will take longer to reject their basic assumptions, and those who may never doubt their assumptions. We all know at least one person who insists that something was a dumb idea and should never have been tried years after it has been successfully implemented. There are still those who question women's current role in the military even though women have proven their ability to serve with distinction in both peacetime and war. Still others may be ambivalent about their basic assumptions but will not be convinced that the proposed innovation is the solution to their ambivalence.

If what we have said up to now is true, then these individuals will be resistant to change and oppose the proposed innovation. How can we overcome or counter this opposition? We do so through the use of power. Power, in the sense that we intend it here, is "the potential ability to influence behavior to change the course of events, to overcome

resistance, and to get people to do things that they would not otherwise do" (Pfeffer, 1992, p. 30). The way in which power is used in organizations is through politics and influence. By politics we do not mean the negative backroom dealing, but the "campaigning, lobbying, bargaining, negotiating, caucusing, collaborating and winning votes" which is necessary if an idea is to be sold (Kanter, 1983, p. 216).

There are many different sources and uses of power. Entire volumes have been written on the subject, but for the sake of clarity and brevity, we will only discuss the sources and uses of power pertinent to our case.

In order to be successful, the innovator must be able to build a coalition of supporters or allies to his cause. He must be able to get others to buy in or sign on to his project (Kanter, 1983, p. 221). Allies are important because it is almost impossible to bring about any innovation alone. The innovator will need resources controlled by others or may require reaching into others' power base. Supporters may also have influence over others whose support the innovator cannot get, but whose cooperation he needs (Kanter, 1983, p. 216).

Supporters may be acquired in several ways. Support may be based on personal relationships built up over years. It may be based on horse trades or promises, "If I get your support on this, I will support you on that" (Kanter, 1983, p. 224). Some will lend their support because they agree or have been convinced that this is the best way to go. Support from

top management is also essential because the endorsement or attention paid by top management may convince others to join in (Kanter, 1983, p. 226).

Another important aspect in getting support is how something is framed and packaged. Framing is determining or changing the context in which something is viewed and discussed (Pfeffer, 1992, p. 203). Perhaps the best way to explain this is with an illustration. An Army maintenance officer wants to get a new maintenance facility built for his organization. The current one is old, drafty, not well heated or lit and none of the equipment works well. He is convinced that this is affecting his units' productivity. He presents a well prepared proposal for a new facility with careful cost benefit analysis showing how the new facility will improve productivity, save money and improve customer service. His proposal is rejected -- no funding is available. The same day his proposal is rejected he gets a memo stating the Army's interest in quality of life issues and requesting proposals to improve quality of life. He resubmits his proposal stating how the new facility will improve quality of life and mentions increased productivity as an added benefit. Viewed in this new frame, the proposal is approved.

Another example of framing is presenting something as a proposal or a done deal. If the innovator asks whether we should do something as opposed to stating we **are** going to do something he will get a much different response. In the

former he is likely to be presented with problems, whereas in the latter, he is likely to get solutions along with the problems (Pfeffer, 1992, p. 204).

Along the same lines as framing is the proposal's packaging, can it be made salable? Is it trial-able? Can it be demonstrated in a trial before accepting or rejecting it? Is it reversible? Can we easily go back to the way it was done before if it fails? People who disagree with the innovator are less likely to actively oppose him if the worst that happens if it fails is things go back to the way they were before (Kanter, 1983, p. 221).

Another source of power is a person's formal position and reputation. Formal position gives the power to direct or order things to be done. Although there are limits to this (some of which we have discussed earlier), for the most part "acceptance of hierarchy, of the chain of command, is so automatic that it makes news when it is violated" (Pfeffer, 1992, p. 133). Formal position also gives others an expectation of expertise. People are less likely to challenge the financial officer on matters of finance or the engineer on product design. Along with formal position, a person's reputation is a source of power. A person wants to develop a reputation as someone who is reliable and predictable, someone who can make things happen, who has power and influence. "The reputation for having power brings more power" (Pfeffer, 1992, p. 136). If one is preconceived as powerful, he is less

likely to be challenged. Others will want to be associated with him, and he will find it much easier to find allies and supporters (Pfeffer, 1992, pp. 136-137).

Another important source of power is timing, being at the right place at the right time. A well timed action may succeed while the same action taken at the wrong time will fail (Pfeffer, 1992, p. 227). Asking Dad for a loan just after he finished paying the bills is not a good idea. During the military buildup in the 1980's, getting military construction projects approved was relatively easy. Today almost impossible. Issues have a quality of "ripeness" (Pfeffer, 1992, p. 244). Knowing when to act and when not to act is as important as the quality of the proposal.

As Sir Francis Bacon noted, "knowledge is power." Information is probably the most important source of power. To be successful, the innovator must begin collecting information from the very beginning. He needs information to clearly define the problem. Knowing the different issues and viewpoints surrounding a proposal as well as what is hot and what is not within the organization will enable the innovator to put the proper frame on his proposal. He must seek information on who are the potential supporters and opponents. Who are the stakeholders? Which ones are important and which are not? Acquiring more information than anyone else will establish him as the technical expert. It will enable the innovator to counter his opponents' arguments before they have

a chance to formally present them. Information will win support because it will show that the innovator has done his homework, and those who are still opposed are less likely to be able to mount an effective opposition (Kanter, 1983, pp. 218-220).

In this chapter we have studied the factors involved in overcoming resistance in order to get an organization to accept change. We have also discussed the characteristics and actions of the entrepreneur. In the next chapter we will present a case of innovative change that occurred in the U.S. Army. We will then compare what we have studied here with the case to see if we can gain any insight into how change can be brought about within the U.S. Army.

III. CASE STUDY

A. LAB/FOB CONCEPT

1. Case A

In September 1990, in the unfinished construction of King Fahd International Airport just west of Dhahran in Saudi Arabia, Colonel Stuart W. Gerald, commander of the Division Support Command (DISCOM) for the 101st Airborne Division (Air Assault), faced making a decision on an issue equally as hot as the suffocating heat of the desert sun. The issue concerned whether or not the DISCOM should change its support doctrine or retain its current support methods. The major unit commanders within the Division had strong convictions on both sides of the issue, splitting the leadership into three groups. Some of the leaders endorsed Colonel Gerald's preference for change, others held strong convictions to the contrary, and the remainder appeared to be completely neutral on the issue.

Colonel Gerald expected that changes in DISCOM's support doctrine would precipitate a great deal of debate. It was difficult to predict how the chain of command above the Division would view a change in the unit's routine support procedures prior to a conflict with the fourth largest military force in the world. There was equal uncertainty

concerning the reaction of DISCOM's subordinate commanders and soldiers who were trained in the established procedures that they had practiced for years in preparation for a conflict like the one they were currently facing. It would be reasonable for them to question whether there was enough time to train for a new support concept before a ground war was initiated. Did the soldiers within his command have the ingenuity to smooth rough edges and make the new concept work successfully on the battlefield? Could the Division successfully execute its mission requirements under the current support procedures? Colonel Gerald considered these as well as many other questions in deciding whether or not to implement the divisional service support concept he had been developing since early in his command assignment. The decision had to be made prior to entering a ground war with Iraq. He did not have much time before he had to act.

a. Background

The 101st Airborne Division's air assault doctrine was initially developed during and tailored for the Vietnam War. The Army realized many benefits of the helicopter, a new weapon during this era. Initially, the helicopter was used for medical evacuation purposes and limited troop transport. However, the mission of the helicopter expanded rapidly as the Department of the Army poured money into the development and acquisition of better aircraft. As the lift capacity

increased, the ability to transport troops and equipment improved. As a result, the helicopter was no longer limited to emergency resupply and small unit transport (small quantities and weight). Helicopters could now lift critical combat equipment, supplies, and large units and deliver them quickly to places that were not accessible by ground movement. Terrain was no longer a limiting constraint. The main concern now was the number of helicopters in the service.

Realizing this powerful capability, The Department of the Army began plans for a new type of division. The Division would be light in nature (similar to an airborne division) and be allocated an aviation brigade with more helicopters than any other division. The mission for the Division was to be capable of moving anywhere on the battlefield quickly with significant fire power. The Division which assumed this mission was the 101st Airborne Division. The success and lethality of this division during the Vietnam War awarded the 101st Airborne Division (Air Assault) with the permanent mission of air assault doctrine.

Many configuration changes for the Division occurred in the decades following the Vietnam conflict. The predominant concern for the Army was preparation for a full-scale battle on the European continent opposing the Soviet threat. Terrain was no longer the dense jungle of Southeast Asia, but the rolling European farmlands which favored tank and mechanized battles. The Soviet tanks strongly outnumbered

the tanks in the Allied inventory. This type of warfare negated the value of air assault doctrine developed in the Vietnam War. The predominant mission of the helicopter centered on a tank killing platform while light, highly mobile forces became less a focal point. The combat forces within the Division remained relatively light but the logistical support tail in the forward brigades and in the Division rear continued to grow in order to support forecasts of enormous consumption rates and destruction of supplies and equipment that would occur in an all out battle with the soviets on European soil. As a result, the DISCOM, a brigade size unit with the mission of providing logistic support to the Division, accumulated more equipment to efficiently handle the increased number of supplies the European contingency mission required. As a result, the 101st Airborne Division 'gained weight.'

With the collapse of the Soviet Union and the forming of a unified Germany, the mission of the United States military forces evolved to a continental United States (CONUS) based force capable of force projection, deploying to any location worldwide on any type mission. The emphasis changed to an economical, well-rounded force with many capabilities (including air assault capability). The 101st Airborne Division's specific competency of air assault operations assured the Division's survival in an era of force reductions. The immediate threats to the nation's interests were well

suited for highly mobile, light forces. The divisions who could deploy quickly and economically to any theater of operations with sufficient force to overwhelm the enemy would be the divisions selected for future missions. Selection for these operations further reduced a division's risk of deactivation in the government's force reduction plan.

b. March 1990

In the late afternoon in the 101st Airborne Division (Air Assault) Conference Room, the Commanding General (CG) for the Division, expressed a strong concern about the Division's ability to conduct air assault operations. The Division was considered for deployment to the operations conducted in Grenada and Panama but was most probably not selected due to the sortie requirement to move the Division. Although the Division carried significantly more firepower than the 82nd Airborne Division, the cost in time and money to deploy the 101st Airborne Division made the 82nd a more appealing force for deployment. There was also significant skepticism both within the Division and in the higher echelons of command that the 101st could not attain its mission requirement of mobilizing within 18 hours due to the large quantities of equipment organic to the Division. The CG challenged his commanders to lighten their units or face future overlooks, force structure cuts, or possible mission failure if called upon to deploy.

Shortly after the meeting, Colonel Gerald sat down with the First Brigade Commander in the Officer's Club to discuss a recent exercise the brigade conducted at the Joint Readiness Training Center at Fort Chaffee, Arkansas. Shaking his head, the Brigade Commander expressed the problem that plagued him throughout the exercise. "I couldn't maintain an offensive effort. Each time I moved firepower to the front, the OPFOR (opposing force) attacked the BSA (Brigade Support Area) and forced me to pull my offensive capability back to the rear so I didn't lose my logistic line of support. Being forced to play on the defense, the exercise developed into a war of attrition which I couldn't win."[1]

Colonel Gerald understood the problem much more than the First Brigade Commander realized. Since his assignment to the 101st Airborne Division as the DISCOM commander, the size and weight of the support tail throughout the Division troubled him. Colonel Gerald used this opportunity to gain an ally in support of an idea he was confident would significantly improve the Division's ability to conduct air assault operations. "As it stands right now, the tail is wagging the dog. Suppose I reconfigured the Division's support doctrine so that you didn't have such a large burden for rear area defense? I have an idea that could

[1] The quoted dialogues in this case study are fictional statements, unless otherwise footnoted, that are based on actual events or statements from interviews conducted in support of this thesis.

cut your CSS elements in the BSA by more than 50% without degrading the quality of support you currently receive. This will enable you to move on the battlefield without dragging a huge support tail and it will definitely reduce your burden of rear area security so that you can establish and maintain offensive momentum."

The First Brigade Commander was immediately skeptical of the idea. He was not sure if he liked the idea of losing men and equipment normally under his control in combat. His experience has usually supported the more-the-better philosophy as applied to combat power. This plan reached deep into his area of control. However, current tactics were not working well as was evident in the thrashing he received at JRTC and Colonel Gerald's idea supported the CG's directive to lighten the force. He had used up all his ideas, and he was ready to try just about any new suggestion.

With an ally in his corner, Colonel Gerald believed he had the backing he needed to approach the Division Commander with his concept. Colonel Gerald could rely on the First Brigade Commander to endorse the idea. The next step was to gain approval to test the concept now that he had the brigade needed to test it on.

c. The White House

Among the first sites visitors see when entering Fort Campbell, Kentucky, home the 101st Airborne Division (Air

Assault), is the white, World War II vintage building which houses the Division Headquarters. Inside the immaculately polished antique building, on another hot and humid late spring day, Colonel Gerald informally presented his idea to the commanding general. The CG held his DISCOM commander in high regard. His rich background stemming back before the Vietnam Conflict in aviation and logistics operations made "Stew" Gerald the choice pick for the DISCOM command in an air assault division. Most of Colonel Gerald's suggestions were approved with very little prodding required. However, this current proposal concerned delicate matters that could significantly ruffle the feathers of his infantry brigade commanders and some of his primary division staff members.

In his normal, laid-back but to the point fashion, Colonel Gerald presented the benefits of scaling down the forward deployed DISCOM elements in the infantry brigades.

> There will not be a sufficient network to sustain the Division in a bare base environment. We need to sustain the brigade task forces the way <u>we</u> used to support outposts in Vietnam (the CG served there as well). Instead of tacking a huge logistical tail on the brigade, we need to lighten the tail, break down and configure the supplies into unit packages in the DSA (Division Support Area), and deliver the supplies directly to the combat units on the ground. We should be flying the supplies right over the BSA, directly to the troops. We've certainly got enough aircraft in the Division to do it. Besides, you've seen what a monster the BSA is. The brigade commanders should be able to focus on fighting the

> battle without having to look over their shoulder[s] and drag the BSA along.[2]

His unemotional and even temperament belied the intensity he held inside. A few of his subordinates learned the difficult way that this laid back demeanor tolerated nothing less than good order, discipline, and 100 percent effort by everyone.

The benefits of lightening the brigades strongly appealed to the CG. He was willing to take-on the hazards of just-in-time inventory procedures if Colonel Gerald said he could manage this risky process in a wartime environment. However, he was not confident that his infantry brigade commanders would hold losing a large portion of their commands in high regard (see Appendix A). He knew that without the backing and total effort of the commanders, the initiative did not stand a chance, no matter how sound the concept.

The CG's reply was exactly what Colonel Gerald hoped for. "If you can convince one of the brigade commanders to give this concept an honest effort and it passes a challenging test, then we will stand a better chance of convincing any adversary to this initiative that the change is mutually beneficial to the killers and the logisticians. Without a consensus among the brigade commanders and the

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[2] A quote from the best recollection of CPT Frank Varnado, the support operations Officer on Colonel Gerald's brigade staff. Quote taken from an analysis paper, Entrepreneurial Leadership, Frank Varnado, July 24, 1992, p. 4.

division staff, this initiative could hurt us more than help us."

With those directives, Colonel Gerald and Colonel Hill began plans to conduct an exercise to test the idea.

d. Golden Eagle 90

On a typically hot and humid June day in the training areas of Fort Campbell, Kentucky, the skies were busy with helicopters of every type. There was a noticeable difference in the aerial traffic. Usually the sky was cluttered with helicopters on the first day of an exercise as units were deploying to their training areas. On this particular exercise, the traffic remained at a high operational tempo everyday. Another noticeable difference was that the lift helicopters were moving significantly more logistic supplies than normal. Normally, due to the limited resource of lift aircraft, most helicopters were committed to troop and combat equipment displacement. Aircraft moving logistics (commonly referred to as logbirds) were either a result of the rare occasion of an idle lift helicopter or hours of determined staff work to schedule aerial movement of supplies. The combat elements always had precedence to this valuable resource. This exercise, Golden Eagle 90, was different.

The helicopters converged regularly to a large open field. Like busy ants, soldiers moved supplies on and

off the field. In the distance, a large rapid refuel point (RRP) was busy with a torrent of helicopters. Soldiers dripping with sweat crawled over supplies tactically arranged in the field for movement to forward deployed units or were opening cargo nets as forklifts moved supplies within the concealment of the forest line. On the edge of the forest, Colonel Gerald spoke with the CG.

Colonel Gerald explained the good and bad points being revealed during the test. Many areas needed a lot of work in order to make the new system of support work as well as Colonel Gerald expected. Although it was the first time DISCOM and First Brigade used the system, his concept was performing well. Most importantly, the Division Commander seemed to be favoring the new concept more each day. However, he still was not prepared to etch the system in stone and bless it as division doctrine. There was still too much opposition to the idea within the Division. There was no apparent reason to rush the concept development. The Division commander felt there was time for Colonel Gerald to prove the efficiency of the system and sell it to the plan's adversaries. He strongly preferred selling the plan above forcing it on the rest of the Division.

e. The New Support System

Colonel Gerald designed the new support concept to be a flexible and efficient method of conducting logistics

support for an air assault division. It incorporated many of the successful procedures developed during the Vietnam conflict using aerial supply operations and made use of many new ideas developed by the Division to provide light yet robust support. The operational support concept was not without risk. It emphasized just-in-time inventory procedures. As a result, accurate and timely reporting of the logistical status and operational requirements by the supported units (a weak point realized during Golden Eagle 90) was essential for success. The supporting units had to be capable of reacting to emergency resupply as well.

The existing divisional support doctrine the Division had been practicing for years incorporated two major divisional logistic operating bases. The bulk of the supplies (food, water, fuel, repair parts, etc.) and services (maintenance, graves registration, laundry and bath, etc.) are located in the division rear area at the Division Support Area (DSA). High demand items and services are maintained in limited quantities at the BSA located in the brigade rear area (Status quo, Figure 1). Throughput from corps elements to the BSA is used when possible, most significantly in the supply classes of petroleum and water. Approximately three days of supply are maintained in the BSA because the DSA is typically a significant distance away. The main support companies located in the DSA push stocks forward to the BSAs and provide direct support to the divisional elements located in the

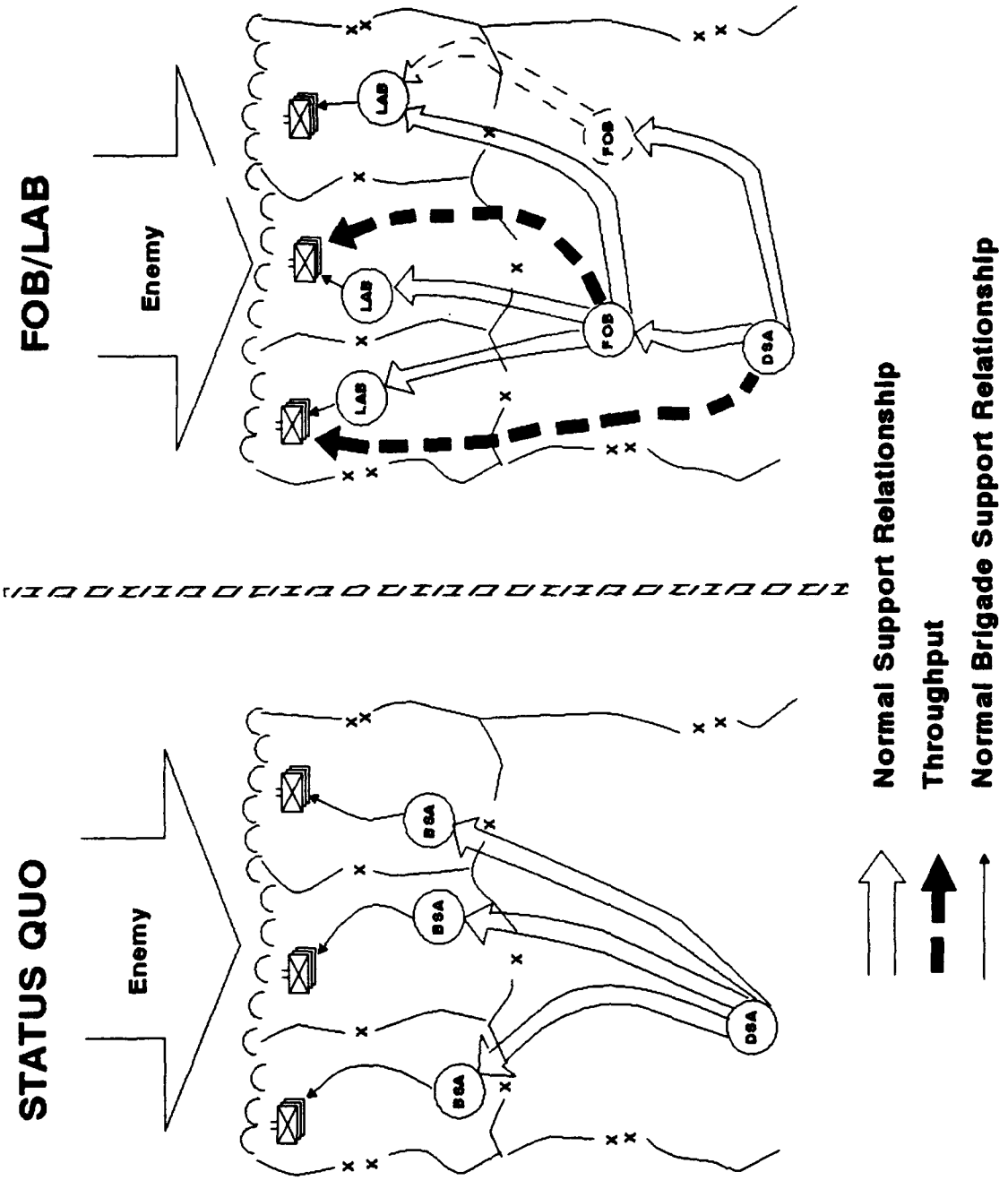


Figure 1: Concept Contrast

Division rear area. Because of the "double" mission, the DSA is only semi-flexible to react to emergency resupply situations for the BSAs. As a result of this semi-flexibility and the "more-is-better" attitude developed during the Cold War, the BSAs are large support areas capable of sustaining the brigade for several days.

The new support plan incorporated three divisional logistic operating bases (LAB/FOB, Figure 1). The DSA maintains the double mission of providing direct support to divisional elements located in the division rear area, but instead of pushing supplies to the BSAs, it pushes supplies to a forward operating base (FOB). The number of FOBs employed by the Division depends on the displacement of the brigades, terrain, and tactical situation. Throughput to the brigades and subordinate units is conducted when the situation allows.

The FOB maintains stockage of high demand items and contains high demand services doctrinally maintained in the BSA. The FOB is an ad hoc organization made up of personnel and equipment not absolutely required by the support elements in the DSA or forward in the brigades. The base is controlled by a lieutenant colonel from DISCOM staff or a DISCOM battalion commander. The ad hoc companies are similarly controlled by captains on DISCOM staff. The FOB is located in or very close to the supported brigade rear areas so that it maintains a close relationship with its supported elements and is able to react to emergency resupply operations

if a supported brigade should run out of a high demand commodity. The FOB's primary mission is to be responsive to the supported brigades' requirements so that just-in-time inventory procedures are successful. Furthermore, the concept emphasized distributing supplies to the units as opposed to burdening the units with the requirement to use their limited transportation assets to pick up their supplies from the distribution points. Due to the proximity of the FOB to the supported brigades, more frequent deliveries of small lots can be used to further reduce inventories in the BSAs. Loads of every type commodity were broken down to 2,000 pounds each. This procedure reduced setup time required to prepare loads for each type aircraft. The smallest lift helicopter could only lift 2,000 pounds. Using this standardizing method simplified aircraft scheduling procedures and increased inventory movement within the Division. Aircraft schedulers were notified of the number of loads required to be moved. What type of aircraft and number depended on what was available. Larger loads only restrict what type aircraft could perform the mission, resulting in lighter lift airframes sitting idle.

Due to lower inventories and better back-up support from the FOB, the BSAs were able to scale down in size significantly. The new concept did not require standardized structures of the forward support companies in the brigade support areas. The structure of equipment and personnel were

tailored to the supported brigade's specific composition and mission. The BSAs throughout the Division shrunk down to less than 50% their original size. As a result, the Division Commander named them Logistic Assault Bases (LABs), hence the initiative was named the LAB/FOB concept. Development of the LAB/FOB concept advanced smoothly, however the biggest challenge to Colonel Gerald's implementation efforts was yet to raise its head.

f. Desert Shield

On August 2, 1993, Iraq invaded the small country of Kuwait, a valuable ally to the United States. A hostile nation now controlled a large percentage of the most abundant oil fields in the world and was in position to threaten the most oil rich fields in Saudi Arabia. The implications of these valuable resources in the wrong hands were far reaching. The rest of the world immediately took action to return the country back to the Kuwaiti people. A coalition of nations formed to provide the military muscle necessary to force Iraq out of Kuwait. Leading the effort, the United States mobilized its rapid deployment forces to be the first elements of the coalition to stand in between Iraq's aggression and the rest of the oil fields south of Kuwait in Saudi Arabia.

Within days, the Division received mobilization orders for Saudi Arabia. By late August, the 101st Airborne Division established a base in the unfinished construction of

King Fahd International Airport (KFIA) in western Saudi Arabia near the city of Dhahran. In the heritage of the 101st's operating base in Vietnam, the base was named Camp Eagle II.

The initial mission for the Division was to conduct covering force operations on the Iraq/Saudi Arabia border. The Second Brigade was the first to establish covering force positions in the north. Due to the extensive distance between these positions and Camp Eagle II, where the DSA was located, the Division established an FOB south of Second Brigade just outside the small city of An Nu'ayriyah. The FOB was named Bastogne. Bastogne was selected as a suitable location for an FOB because it was positioned near major road networks, it had improved surfaces (abandoned airstrip) for helicopter landing zones, and it was near the Division's covering force area. Although Bastogne only supported one brigade, it was an ideal opportunity for Colonel Gerald to continue development of the new support concept. As the other brigades moved north, the FOB proved to be extremely flexible and capable to adjust to the increased demands. To improve support quality, the Division established a second FOB further east at an unimproved airstrip just west of an abandoned village. This FOB was named Oasis. Oasis supported First and Third Brigades in the east while Bastogne continued to support Second Brigade.

In the pre-war environment, the support structure appeared to be efficient and trustworthy. However, there was

the important question whether the new support doctrine should be implemented at this point in time. One of the brigade commanders wrote a scathing letter to the CG stating that if the LAB/FOB concept were adopted as the Division's support plan during hostilities, soldier lives would be lost and the Division would be doomed to failure.

At the lower echelons of command, within DISCOM, doubt and opposition surfaced as well. Several company commanders strongly disliked some elements of the new concept. The company commanders were now in charge of approximately 40 to 50 percent of their soldiers but were answering to the performance of 100 percent of the their soldiers. The FOB required the commanders to send a significant percentage of their soldiers and equipment to a staff officer (in temporary command) in order to organize the FOBs. Soldier performance and equipment maintenance remained the original company commander's responsibility to a large extent. The company commanders did not believe they could adequately supervise these elements when they were not operating within their areas of authority.

Many staff officers at battalion and brigade level held strong convictions against the plan as well. Established processes such as personnel reporting became extremely difficult as personnel 'went to the winds.' Company commanders shuffled their personnel around to suit their own requirements. The staff company commanders at the FOB were

frustrated because they had no disciplinary authority to discipline the soldiers under their responsibility and had to rely on the original company commander to initiate disciplinary proceedings. They also felt that the original company commanders were 'dealing from the bottom of the deck' when deciding which soldiers and equipment would be sent to support FOB operations. Many more problems arose which required battalion commander and DISCOM commander intervention to resolve. However, the leading cause of adversity was never resolved to the satisfaction of opponents to the new plan. Too many commanders felt that the LAB/FOB concept moved too much of their command to someone else's authority. They felt that they lost too much power and autonomy.

There were also upsides in favor of getting the plan approved and implemented. The Second and Third Brigade Commanders changed command prior to a ground war with Iraq. One of these commanders violently opposed the change and the other would not openly commit himself to either side of the debate. Prior to assuming command, the new commanders were thoroughly briefed by the Division commander on the new concept. Although the LAB/FOB concept was radically different than the service support doctrine they were used to using, they both had positive attitudes toward the change and viewed it as a necessary conversion to take full advantage of the air assault capabilities of the Division. The positive attitudes of the newer brigade commanders coupled with the strong

backing of the First Brigade Commander significantly strengthened consensus for the change within the Division.

Colonel Gerald realized that there would be opposition to the concept no matter how long and hard he worked to resolve differences in opinions. He could only minimize criticism to the plan, not abolish it. A decision had to be made whether the Division would use the LAB/FOB concept when hostilities escalated to a ground war. Colonel Gerald had to decide whether he had the support he needed to make the plan work and enough evidence proving that the new support plan was essential for the Division. The primary criticism of the change was that it was being implemented on the eve before battle. Yet he was sure that if current divisional service support procedures remained, the Division's mission was at great risk. He was confident that large BSAs would prove to be too cumbersome to successfully execute division sized air assault operations. The limited resource of helicopters would be overscheduled moving soldiers and equipment belonging to the BSAs and the logistics essential to the operation would be backlogged waiting for available lift assets. However, he also recognized that without a general consensus within the Division and 100% effort to make it work, the new plan also could fail. Successful implementation and execution of these changes would require flexibility and innovation from all the leaders in the chain of command and a strong determination to make the concept work.

2. Case B

a. Desert Storm

On 17 January 1991, the 101st Airborne Division began movement from its covering force positions in northeast Saudi Arabia and Camp Eagle II (KFIA) to the west to establish a tactical assembly area, named TAA Campbell, just east of the city of Rafha. The Division's maneuver was in preparation for a bold and aggressive mission to be conducted by the Division upon initiation of the ground war with Iraq. The mission of the 101st Airborne Division was to establish an FOB (FOB Cobra) approximately 90 miles into Iraq. FOB Cobra would be the staging base for follow-on missions involving interdiction of enemy movement along Highway 8, which would likely be retreating Iraqi Republican Guard forces from Kuwait or reinforcements from Baghdad. The Division's follow-on mission was to assist in the western envelopment of Iraqi forces in and around Kuwait. Though the payoff for the operation would be impressive, the risk of an air assault 90 miles into enemy territory followed by further missions extending the distance in excess of 150 miles would be enormous. The DISCOM faced the immense task of supporting the mission with lines of supply that stretched to the breaking point. FOB Cobra would receive only aerial replenishment until the ground lines of communication reached the FOB approximately three days into the ground war (G+3). This left the DISCOM with the

challenging mission of developing a major logistics base with limited and tenuous aerial resupply.

First Brigade was assigned the task of conducting the initial assault into Iraq and securing FOB Cobra. Once Cobra was secured and DISCOM was prepared to support the follow-on missions from that location, Second and Third Brigades launched assaults from Cobra north to Highway 8 (see Figure 2). In order to prepare for western envelopment operations towards Kuwait, the Division established another FOB (FOB Viper) in the 24th Infantry Division's northern sector. Second Brigade successfully launched its assault from this FOB into EA Thomas interdicting enemy movement on Highway 8 south of Third Brigade's area of operations (AO Eagle). Before operations for western envelopment of the Iraqi forces could be initiated, the President of the United States called for a cease fire. The 101st Airborne Division successfully denied enemy movement along Highway 8 and was prepared to continue its rapid advancement towards Basra. Thus ended the Hundred Hour War.

b. After-Action Review

The LAB/FOB service support concept was a resounding success. It withstood a test under the most challenging conditions. Despite severe weather conditions, and the requirement to supply three ravenous brigades engaged in combat from lines of supply stretched to the breaking

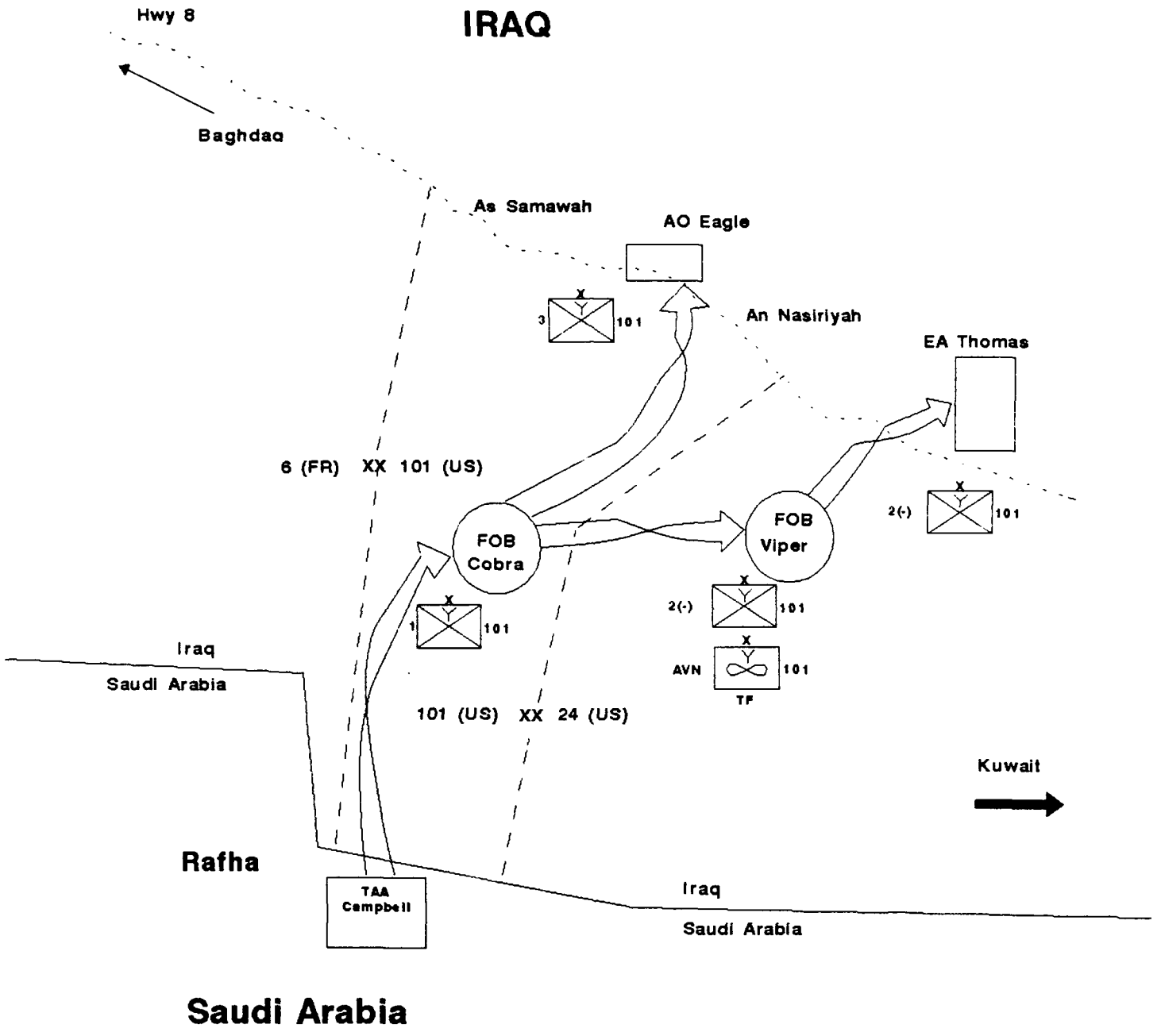


Figure 2: Desert Storm

point, the new service support concept proved to be efficient, flexible, and fully capable. The Division Commander's successor was equally impressed with the concept.

> ...the Division's DISCOM fought and won a terrific war against time, distance, weather and friction to deliver service support to the units already flying and fighting deep, all the while readying for the great leap to Cobra. For the logisticians, the campaign began on 14 February and did not let up until well after the cease-fire. Rarely had anyone in the DISCOM been able to train to resupply forces at this scale and pace. The principles were known, and the piece parts familiar, but it is one thing to imagine a LAB or FOB and quite another to execute one in combat. DISCOM prepared well for the first wartime validation of the LAB and FOB concept. Thanks to a lot of hard driven miles and many slingloads, the Division would fly in to Cobra "full up," ready to carry out sustained, successive air assault operations (Miller, 1993).

The challenging mission assigned to the Division during Operation Desert Storm not only validated the effectiveness of COL Gerald's plan, but also validated COL Gerald's view that change was absolutely necessary. The Third Brigade Commander generally summed up the opinion of the leadership in the Division.

> The change was very necessary. No doubt about. If there's a better idea -- I don't know about it. The fact is, we could not have achieved the operational reach that we did if we had been encumbered by our old concept. It just took entirely too many CH-47 sorties to get the forward support companies in to establish a BSA. For deep air assaults, the LAB is the only way to go (Third Brigade Commander, 1993).

B. EPILOGUE

The success of the concept has etched LAB/FOB plan into the support doctrine for the Division. Although the Division's service support structure has undergone significant

change since Operations Desert Storm and Desert Shield, the LAB/FOB concept has remained the standard operational procedure in supporting division operations.

The success of the principals who were proponents of the change are equally impressive. COL Gerald is now referred to as BG Gerald. The Commanding General of the Division now wears four stars and is currently the Vice Chief of Staff for the United States Army. The other proponents of the concept are currently filling key positions in the Army and have already been promoted to general or have been selected for promotion and are waiting for orders. The principal vehemently opposed to the change is no longer on active duty.

IV. ANALYSIS

This thesis is primarily concerned about how change is successfully implemented in a military organization. The case study of the LAB/FOB service support doctrinal change in the 101st Airborne Division provides an example of successful innovative change in the Army. In this Chapter, we will analyze this case using the factors effecting change that were presented in Chapter II.

A. THE INNOVATIVE PROCESS

The LAB/FOB service support doctrinal change was a first order, innovative change for the 101st Airborne Division. It is a first order change because although the innovation had a dramatic affect on the Division, it occurred within the division support system. The basic logistical support system where the DISCOM provides support to the brigades and other elements of the Division remained unchanged.

The LAB/FOB concept is an innovative change because it is an original idea that is seen through to successful implementation. Initially, COL Gerald created an idea of a "light logistical footprint" supporting each brigade. At this point, he had not developed the exact composition of each unit or developed a detailed mission for each unit under the concept. His initial concern was to reduce the size of the

vulnerable and cumbersome BSAs by moving significant combat service support from forward brigade control to division control in the division rear area (behind the brigades). This inexact idea was presented to the Commanding General in this format. Once COL Gerald received approval to develop the concept further, the idea transitioned to the design phase of innovative change.

The design phase initiated with the DISCOM and First Brigade staffs planning for the Golden Eagle exercise. The DISCOM staff, under the guidance of COL Gerald, developed detailed plans for exactly what the LAB and FOB would be and what service support assets (personnel and equipment) would be located in each location. The brigade staff refined logistical planning and reporting procedures which were needed in order to make the LAB/FOB concept work. By the time of the exercise, the basic idea had been transformed into a clear and tangible package ready to be implemented. The implementation phase began with the testing of the concept during the exercise.

During Desert Shield, COL Gerald established the LAB/FOB concept as the way DISCOM would support the Division. The plan was then implemented on the Division as a whole, not just First Brigade. The success of the concept during Desert Storm was the final validation needed to establish the concept as the Division's permanent service support doctrine. COL

Gerald's entrepreneurial skills were successful in moving the innovation from creation to implementation.

COL Gerald's idea of using an intermediate logistic operating base (the FOB) between the BSA and the DSA was not original. According to one of the Brigade Commanders during Desert Storm who had previously served as the Division G-3 (operations and training officer), the Division had experimented several times with an FOB (Telephone Interview, 1993). The idea of light logistic bases in the brigades (LABs) supplied almost exclusively by helicopter was adapted from procedures used in Vietnam. What makes COL Gerald an entrepreneurial agent is his ability to coordinate the different concepts into a package that significantly increased the Division's ability to rapidly deploy and move quickly on the battlefield and implement the plan.

1. The Entrepreneur/Innovator

COL Gerald is a patient leader who is receptive to new ideas. Early in his command, he quickly established a favorable environment for ingenuity. Many new innovations were developed which significantly increased the DISCOM's ability to do business. For example, in order to meet the mission requirements for FOB Cobra during Desert Storm, a large helicopter refuel point had to be established extremely quickly. COL Gerald requested the Supply Battalion to search for innovative ideas down to the lowest levels of leadership.

At platoon level, the idea of slingloading 10,000 gallon fuel bags filled with 3,000 gallons of multifuel, maximizing a CH-47 helicopter's lift capacity, was suggested. During the Cold War years, such a thought would have been outrageous and most likely not suggested. However, COL Gerald and the supply battalion commander were quick to test the idea. Standard set-up procedures and system configurations would have required significantly more time resulting in slower rotations of helicopters to the FOB. Many more innovations were developed in the DISCOM because of the tolerant environment for ingenuity COL Gerald established.

Concerning the characteristic of risk taking, COL Gerald stated that he did not feel he was taking any risk, although many around him felt he was taking a significant risk. We believe this differing perception of risk is because entrepreneurs are visionaries. They know their idea will work and they know they possess the energy, focus and determination necessary to make it a reality. They clearly see an opportunity while others are overwhelmed by problems and adversity.

In this case, COL Gerald is clearly acting as an entrepreneur. The LAB/FOB concept was his idea and he personally saw it through to successful implementation. He was the idea person. Although his idea was an adaptation of the way the Division was supported in Vietnam, it was clearly a wholly new idea in the current context. Next, he was the

advocate. He changed his idea into a tangible proposal that he could articulate and stakeholders could comprehend. Throughout the case, he is the champion. He skillfully used the necessary power tools to gather support and overcome opposition. Lastly, he was the administrator who was able to successfully implement his idea.

This analysis evaluated COL Gerald's entrepreneurial characteristics on his accomplishments, our personal knowledge of him and the Myers-Briggs Type Indicator test. The Myers-Briggs Type Indicator (MBTI) test is a personality test based on Jung's theory of psychological types. It illustrates the different ways in which people focus their attention, take in information, make decisions, and choice of lifestyles by categorizing personality types (Hammer, 1992, p. 4). This test is a scientific method to gain some insight into the character and actions of an individual.

COL Gerald has taken the MBTI test several times and his test results reveal him to be a extraverted, sensing, thinking, and perceptive person (categorized as ESTP). Although this may not be the strongest entrepreneurial type, it shows many strong entrepreneurial characteristics. People of COL Gerald's type are adaptable realists who are good at getting others to adapt as well. ESTP type personalities are adept at easing tense situations and pulling conflicting factions together. They are able to see the need of the moment and quickly move to meet it. They are gifted problem

solvers because they do not feel bound to follow standard operating procedures or preferred methods. They see ways to achieve a goal by using existing rules, systems or circumstances in new ways rather than letting them be roadblocks (Hammer, 1992, p. 18).

The Army should seek and support those individuals who have the talent and skills necessary to take an idea from creation through successful implementation. But in the event that these people are few in number, it might be easier to find individuals who possess the skills and are capable of performing one or more of the roles in the entrepreneurial process (intellectual, advocate, champion, and administrator). Thus, the Army could rely on the entrepreneurial teams for innovative change rather than count heavily on a single individual to perform all the roles and functions of entrepreneurship. This approach (collective entrepreneurship) can produce the benefits of entrepreneurship without so much reliance on a single individual (Roberts, 1992). The result has the potential to increase the innovative and entrepreneurial activity in the Army.

B. CATALYSTS FOR CHANGE

For almost half of this century, the threat posed by the Soviet Union has been the focus of the United States' military policy. This threat has been the predominant factor in determining the size and composition of the U.S. military

forces and the missions for those forces. Every member of the Army understood the role of the Army was to contain Soviet expansionism and, if necessary, to fight a ground war primarily in Europe. In this environment, all U.S. military training doctrine and equipment focused specifically on this effort. The threat enabled the U.S. to develop a secure pattern of relations with our allies and enemies alike. It gave us a solid belief in our basic assumptions. Members of the military clearly understood who they were and their purpose. With the collapse of the Soviet Union, they have lost the premise upon which their very identity is based. Although few, if any, mourn the loss of the Soviet threat, many mourn the loss of the secure pattern of relations and basic assumptions that were developed in response to that threat. The loss of the Soviet threat created doubt in what the Army held as true. Since the return of the "Soviet threat" in the near future is very unlikely, the Army must seek out a new pattern of relations and redefine missions, doctrine, and strategies for the future.

Thus, in this case, the Division Commander was concerned about the Division's approach to how it was doing business as early as March 1990. In his opinion the Division was not selected to participate in the two major operations in the 1980s because it was too heavy. His directive to his subordinate commanders to lighten their units underscores his belief that the Division's operational procedures were

inappropriate. The fact that the Division was not selected for any of the recent military operations shows that perhaps the Division's higher command echelons also lost faith in how the Division was doing business.

C. RESISTANCE TO CHANGE

COL Gerald and the First Brigade Commander also shared this loss of faith. Due to his past experience in logistic operations, COL Gerald placed little faith in the success of the Division's combat service support procedures when he first entered the command. The First Brigade Commander lost faith after having his BSA repeatedly destroyed during JRTC exercises. These losses and the resulting ambivalence made the Division receptive to the change presented by COL Gerald.

COL Gerald dealt with resistance to change in several ways. He used open communication to overcome resistance. He explained his new idea in detail at every appropriate opportunity, such as command meetings, so that all stakeholders could better understand his idea and become comfortable with it. He also included everyone in the development of the idea, building a sense of stakeholder ownership. COL Gerald was very receptive to new ideas and innovations and encouraged everyone to endeavor to improve upon his idea. He also allowed time for everyone to adapt to the concept and did not try to 'push' his idea on others. By allowing people time to get used to the idea and not trying to

force it, he prevented many stakeholders entrenching themselves in opposition.

Although we do not feel that fear was a significant factor among the senior leadership of the Division, we know from our personal experience with this case that fear was a factor among the subordinate leaders and staff in the DISCOM (the brigades and division staff). We also know from our personal experience that fear of failure is a significant factor in resistance to change in the Army. Fear not only causes people to resist change proposed by others, but it also hinders people from attempting innovative ideas of their own.

We agree with the literature that the Army's performance evaluation system fosters this attitude of fear. As LTC Richards urges in his article, Performance Appraisal and TQM, the Army must change the evaluation system and begin to evaluate people not only on their achievements but also on the merit of their ideas and their willingness to try them. He states the Army must "drive out fear" and create an attitude which fosters a "love of change" if the Army is going to cope with this period of almost unprecedented change. However, the Army must do this with caution. Although failure is necessary and has acceptable drawbacks in peacetime, failure in a wartime environment usually has catastrophic and unacceptable results. The Army must search for a balance between allowing and supporting failure in peacetime, and selecting and promoting those who will succeed in war.

From viewing COL Gerald's command, it is clear how he dealt with eliminating fear in the DISCOM and promoted innovativeness. Those officers who proved to be innovative and adaptable to change were usually given key positions or responsibilities within his command. COL Gerald did not evaluate officers solely on results. He placed more emphasis on an officer's ability to correct deficient areas and use innovative approaches.

Whether or not he was aware of it, COL Gerald skillfully used power to gain approval of the LAB/FCB concept. His first move in gaining the necessary power to implement his innovative idea was to win the approval of the most influential power in the Division, the Commanding General. Although a general consensus throughout the leadership in the Division was essential for successful adoption of the concept into standard operating doctrine, winning the approval of the Commanding General was a pivotal move to gain significant power and backing. Before presenting the idea to the Commanding General, COL Gerald gained support for the concept from the 1st Brigade Commander. With a willing brigade, the Commanding General would be more receptive to the idea and COL Gerald had the necessary vehicle he needed to try the concept and show it could work.

COL Gerald was careful to frame and package his proposal to take advantage of what was a paramount issue in the Division at the time. When presenting the concept to the 1st

Brigade Commander, he framed the concept as a means to reduce the size of the BSA which would make the brigade rear area more defendable (the primary concern of the Brigade Commander). When presenting the concept to the Division Commander, he framed the concept as a method to lighten the Division and make its combat elements significantly more mobile (the Division Commander's top concern at the time). He also used metaphors such as support to the division in the Vietnam War to draw upon the common experience he and the Commanding General shared. Framed in a favorable light, these two influential stakeholders were quick to become advocates of the new combat service support concept.

He packaged the innovation as both "trialable" and reversible. The 1st Brigade Commander was willing to test the concept with his brigade. The trial would not require significant capital investment and reversing back to the old support procedures would not be difficult. Opponents of the change were less likely to actively oppose it because the trial required no effort on their part. This condition changed, however, once the Division deployed to Saudi Arabia. Once in theater, COL Gerald implemented the concept into the Division's support procedures in the name of further testing. However, he had every intention of making it a permanent change even in the event of a war with Iraq. This move involved the other two brigades and division staff. It required that they implement the innovative support procedures

in their own brigades. As a result, opposition to the concept significantly escalated. At this time, the concept had been tested and proven viable with substantial benefits to the Division over the old support procedures. More importantly at this point in time, COL Gerald had been able to gain enough supporters to overcome opposition. Opponents of the concept lacked the essential power to resist the change.

COL Gerald's formal position in the Division provided him with considerable power. As the DISCOM commander, he controlled the division service support assets that supported the Division. In this capacity, he inherited the position as the primary advisor to the Division Commander on logistic matters. To augment this power, COL Gerald had earned a reputation as a capable logistician with exceptional leadership abilities. Expertise in logistic support crossed with his aviation background qualified him as a capable expert suited for the aviation intensiv challenges of logistic support for the 101st Airborne Division. With this reputation, few were willing or able to mount a credible argument against "the expert."

Timing is another source of power that played a vital role in the success of this innovation. If COL Gerald had tried to change the division service support doctrine in the 1980s as opposed to the turbulent environment of the 1990s, he would likely have experienced failure. In the 1980s, the Soviet expansionism was the threat that U.S. military doctrine

centered on opposing. Light, mobile BSAs were never established as a prominent requirement. Heavy BSAs provided the brigade commanders with significant autonomy in military operations and the capability to absorb the tremendous demands in material and equipment anticipated in a war in Europe. As a result, this mode of thinking established the basic assumptions of the leaders in the 101st Airborne Division, assumptions they had no reason to doubt. But with the collapse of the Soviet Union and the Commanding General's directive to lighten the Division, the timing was appropriate for this innovative change. The timing of the 1st Brigade Commander's frustrating experience at JRTC also presented an excellent opportunity for COL Gerald to win support for his idea.

This analysis shows that our case is a good illustration of how innovative change can be brought about in the Army. It shows examples of the factors effecting change and resistance to change. It also shows how an entrepreneur operates, how he overcomes resistance to change and how he obtains and uses the power necessary to bring about the change.

V. CONCLUSIONS AND RECOMMENDATIONS

The Army currently finds itself in a period of extraordinary change. If A.W. Marshall, Director of Net Assessment, Office of the Secretary of Defense, is correct and we are on the verge of a military-innovation revolution, then the next several decades will be ones of extraordinary change. To successfully cope with this period of change, the Army is going to have to be innovative. It is, therefore, important that the Army leadership understand what innovative change is and how it is brought about.

Our study has shown that innovative change is brought about by an entrepreneur. An individual who has an original idea and the skills necessary to turn the idea into a tangible plan that can be sold and implemented. He also possesses the skills to successfully implement the plan.

To be successful, the entrepreneur must overcome resistance to his innovation. He must allow others the time necessary to realize the need for innovation and to accept the innovation being proposed. He must openly communicate his ideas and allow other stakeholders to freely express their concerns. He should "involve everyone in everything" so everyone feels a part of, and comfortable with, the change. He should eliminate fear and create a "love of change", an atmosphere where change is the norm, and people expect and

welcome change, an atmosphere where they are evaluated on their innovative efforts and support of others' innovative ideas.

The innovator must also be skilled at obtaining and using power. The innovator needs to win the support of key stakeholders and overcome possible opponents. Information is a key source of power. It enables the innovator to have more knowledge of the subject than anyone else and, therefore, be perceived as the expert. Knowledge of what is important in the organization at the time enables the innovator to properly frame his proposal and also time its introduction.

Understanding what innovation is and the factors effecting innovation should help the innovator be successful in his attempts. Understanding the entrepreneur and what he does will help the rest of us to identify entrepreneurial efforts and lend our support to them.

A. RECOMMENDATIONS

To be innovative, the Army should seek out and support those individuals who possess the skills of the entrepreneur. But as we stated earlier, in the event that those individuals are few in number, the Army can increase entrepreneurial activity by building entrepreneurial teams. Rather than relying on a single individual, it is the team that possesses the skills necessary to bring about innovative change. The team would have an idea person, an individual with an original

idea for an innovative change. He would pass the idea to an advocate who has the skill to turn an idea into a tangible plan which can be sold and implemented. An idea champion would then use the politics and power necessary to gain support and overcome the resistance in order to get the idea implemented. The approved plan is then given to an administrator who has the organizational and leadership skills necessary to make the plan work.

The Army should also create an environment that fosters innovative activity. The Army can go a long way toward that goal by changing the current evaluation system. People should be evaluated on their "love of change", on their willingness to try innovative ideas and on their efforts, not on the achievement of short sighted achievable goals.

B. FURTHER RESEARCH

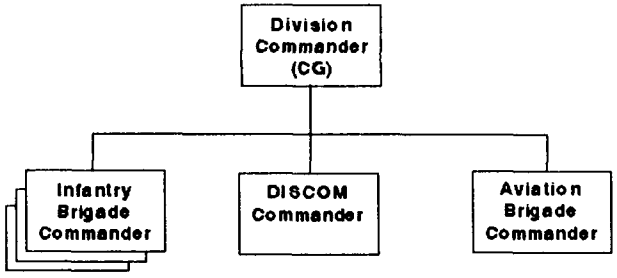
In our research we discovered that one brigade commander was vehemently opposed to the LAB/FOB concept and turned many members in his command against it also. When a new commander took charge who supported the change, he could not believe the opposition he faced within his own command. How he dealt with that opposition and how the opposition effected the brigade's performance in the Gulf War may prove an interesting and useful case study.

The innovative change in our case was somewhat unusual in that the process was disrupted by the Division's deployment to

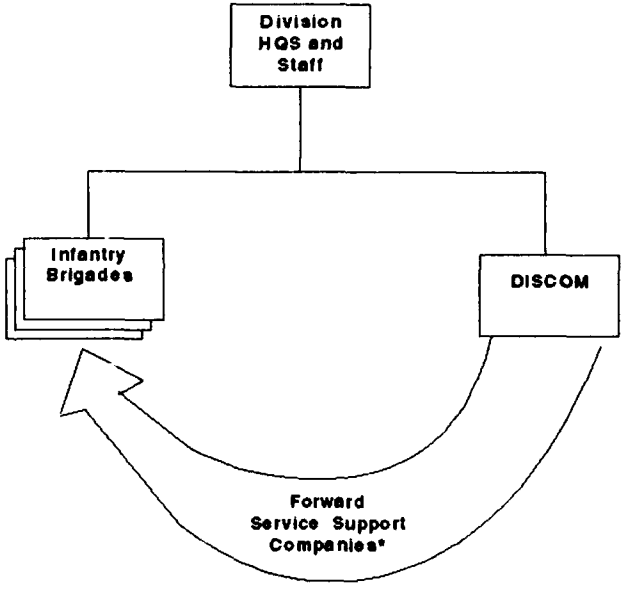
Saudi Arabia. Had the Gulf War not occurred when it did our case may have been somewhat different. We do not doubt that Colonel Gerald would have still been successful, the process would have simply played out differently. A study of a case of change that was not disrupted by extraordinary circumstances would be useful.

We also recommend that the Army provide formal instruction on innovative change for all its officers. This instruction should be provided at the Combined Arms Services Staff School and the Command and General Staff College. We hope that formal instruction in the aspects of innovative change will increase necessary change and entrepreneurial activity within the Army.

Command Relationship of Principals Involved In the Change



Shift In Command Authority Under Task Organization



* Forward service support companies are task organized under the control of the infantry commanders. Under the LAB/FOB concept, only elements of these companies fall under the control of the infantry brigade commanders.

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